

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

THOMOMYS DOUGLASII SHAWI, A NEW SUBSPECIES
OF POCKET GOPHER FROM MOUNT
RAINIER, WASHINGTON.

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Investigations by the U. S. Biological Survey and the State College of Washington in Mount Rainier National Park, Pierce County, Washington (1919), and in the Cascade Mountains of western Yakima County, Washington (1917), have disclosed the existence in the high mountains of that region of an undescribed subspecies of pocket gopher, belonging to the *douglasii* group. I take pleasure in naming this form in honor of Professor William T. Shaw, Zoologist of the State College of Washington, Pullman, Washington, a leader in distributional and ecological studies of the higher vertebrates of the State.

Thomomys douglasii shawi, new subspecies.

RAINIER POCKET GOPHER.

Type.—From Owyhigh Lakes, 5,100 feet, Mount Rainier, Washington; No. 232,807, U. S. National Museum, Biological Survey collection; adult male, skin and skull; collected by George G. Cantwell, August 9, 1919; collector's number 1464.

Diagnostic characters.—Similar to *Thomomys douglasii limosus*¹ but tending to be larger, paler, and less intense brown. Zygomata narrower and mastoid width tending to be less.

Geographic range.—East side of Mount Rainier National Park; also the Cascade Mountains in the vicinity of Mount Aix, Cowlitz Pass, and Goat Rocks. Life Zone, Hudsonian.

Color.—Above (in August specimens) cinnamon-buff or clay color, paling to pinkish buff on sides; the postauricular spot blackish plumbeous, inconspicuous; fore part of face varying between deep and light mouse gray, tip of nose often with white spot; underparts whitish, lightly washed with buffy, and with whitish areas on chin and occasionally on the middle of the breast or in the inguinal region; top of both fore and hind feet white;

¹Specimens from localities intermediate between the type localities of *Thomomys douglasii douglasii* and *T. d. limosus* indicate intergradation between them.

hairs of tail whitish. The dark plumbeous hair bases show through to some extent on the underparts, and cause an appreciable darkening effect. The same is true to a lesser extent above. Young specimens are in better pelage than adults; the color of their upperparts is like that of adults, but the underparts are more whitish. Every adult shows from one to four molt lines, and in some specimens the pelage is obviously much worn.

Skull.—Similar to that of *Thomomys douglasii douglasii*, but with shorter brain-case, zygomatic width tending to be less and zygomata more nearly square, the arches distinctly broader posteriorly than in *douglasii*. Similar to that of *T. d. limosus*, but zygomatic width less, the arches less expanded.

Measurements.—*Type*: Total length, 230 mm.; tail vertebrae, 70; hind foot, 33. Skull: Basal length, 34.5; nasals, 14.9; zygomatic breadth, 21.5; mastoid breadth, 19.2; interorbital breadth, 6.3; alveolar length of upper molar series, 8.3. *Average of five males*: Total length, 227 (max. 232, min. 222); tail vertebrae, 72 (76–70); hind foot, 32.6 (34–31). Skull: Basal length, 34.1 (34.5–33.6); nasals, 14.5 (14.9–14.0); zygomatic breadth (four specimens), 21.6 (21.9–21.2); mastoid breadth, 19.0 (19.4–18.8); interorbital breadth, 6.6 (7.0–6.1); alveolar length of upper molar series, 8.4 (8.6–8.2). *Average of three females*: Total length, 206 (max. 215, min. 195); tail vertebrae, 64 (70–60); hind foot, 30 (30–30). Skull: Basal length, 31.5 (32.0–31.3); nasals, 13.6 (14.0–13.2); zygomatic breadth (one specimen), 20.5; mastoid breadth, 18.0 (18.5–17.7); interorbital breadth, 6.4 (6.5–6.3); alveolar length of upper molar series, 8.0 (7.9–8.3).

Remarks.—Contrary, perhaps, to expectations, the Rainier Pocket Gopher finds its closest affinities with the *douglasii* group, heretofore known only from the lowland country west of the Cascade Mountains in Washington and Oregon, the Olympic Mountains, and the Washington side of the Columbia River east to White Salmon, Klickitat County. Externally and cranially the Rainier Pocket Gopher is similar to *Thomomys douglasii limosus*; and intergradation with this form is shown by specimens from Signal Peak, Yakima County, and Trout Lake, Klickitat County. The relations of the new form to the pocket gophers found east of its range are not so clear. Specimens from Conrad Meadows, McAllister Meadows, and Bumping Lake, on the east slope of the Cascade Mountains in Yakima County, seem to show intergradation with the *fuscus* group.

The new form has quite certainly ingressed to Mount Rainier from the Cascade Mountains to the east, and is found at present only on the east side of the Mountain, from about Cowlitz Divide to Grand Park.

Specimens examined.—Total number, 15, as follows:

Mount Rainier, Pierce County, Washington: Owyhigh Lakes, 5,100 feet, 6; Glacier Basin, 5,935 feet, 6.

Yakima County, Washington: Twin Sister Lakes, near Cowlitz Pass, 5,300 feet, 1; 2 miles southwest of Conrad Meadows, 4,200 feet, 1; head of Hindoo Creek on Mount Aix, 6,500 feet, 1.